## Points of View

# Syphilis social impact: some historical events

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#### **Abstract**

The author comments the origin and spreading of syphilis in Europe on the 15<sup>th</sup> century and its relevant influence on the society's moral and cultural values.

n the last decade of the 15<sup>th</sup> century (1) (WN: see notes at the end of the text), all over Europe, the alarm was set off before a pestilent ill, new and terrible, that covers the whole body with dirty sores, causing violent pain and eroding the body.

All had started in Naples. Charles VIII from France, heading an army of around 38,000 men, from infantry to chivalry - the former almost all French, the latter in their majority mercenaries from several countries - advanced through Italy, heading for the Kingdom of Naples with the intention of conquering it invoking hereditary rights. On the 22<sup>nd</sup> February 1495, Naples surrendered without a fight, except for a fortress offering a staunch resistance. Among such troops there were Spanish soldiers sent by Ferdinand of Spain (2) in order to help and defend Neapolitans. However, some of them were carriers of this new and odd disease that added to the pain sores covering the whole body. They had come from Seville saying that tavern and popular neighborhoods women in this town also suffered of same pestilence emerging around the second return voyage from Colombo (3).

The illustrious anatomist Gabriel Fallopius (1523 – 1562) from Modena, in its monograph *De morbo Gallico* published in Padua in 1563, where he was an Anatomy Lecturer, quoting his father, who was among the besieged, tells that the fortress defenders made the most beautiful women and girls, those suffering of the same disease as the Spaniards, because it had been contracted with them, go out of the fortress. Charles

VIII soldiers, paying more attention to beauty then to sores, pass them from one man to another. In this way quickly the pestilence was disseminated among the besieging French army.

Such anecdotal detail does not explain naturally, on its own, how quickly the infection was spread. Some Spanish mercenaries have integrated the French army before Naples siege and had already spread the disease in all the town brothels and taverns. While Charles VIII enjoyed the weather and the natural beauty of Naples (and not only because he would also contract syphilis!), his men were occupied in love affairs, in a "dolce far niente" that would cost them dearly (4).

In the meanwhile the French King heard that Milan, Florence and Venice had decided to fight in arms in favor of Naples, understanding that on his turn he might be besieged in this town and tried to retreat to France. In Padua, he faced a 40,000 men army. Charles VIII men, extremely demoralized and weakened by this terrible disease spreading quickly among them, succeed however, at the expense of many losses, to overcome such odd reaching the French border. From thereon both those born in France, as the mercenaries looked for, alone or in small groups, reaching their home towns and villages. This has disintegrated the proud and strong French army, defeated not by weaponry but by disease and the horrific condition the men were in.

The physician Joseph Grunpeck, from Burckhausen (1472 – 1532), author of the *Tractatus de origine pestilentiali scorra sive Mala de Franzos* published in Augsburg, in November 1496, describes the soldiers' condition, reporting a horrible rash covering their body and face, as well the thick sores growing in their faces and bursting with a pestilent smell. It also refers the looks of these miserable were so repugnant that their fellows would abandon them to their bad luck.

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Among the running away soldiers, many men looked apparently well. However, underneath their uniforms the skin was covered of spots and blisters and had small ulcerations in the palate and tongue. Without causing the horror that their sicker comrades in arms did, they spent their money with prostitutes, and then went to the public baths where they would make themselves bleed and being looked after by the barber-surgeons, leaving everywhere the disease germs.

As if this was not enough, after Charles VIII death, the nephew Louis XII claimed again his rights to the throne of the Kingdom of Naples, accepting this time to share it with the Spaniards and for the purpose had an army landing in Calabria. However the borders marking such division were not respected by the two powers and soon weapons were replacing political decisions, with the Spaniards succeeding to throw the French out of Naples and Italy, taking control of such kingdom. Again in contact with the disease foci, both the French as the Spaniards, as well as the Swiss mercenaries and vivandieres following them, got contaminated, returning sick to their home countries.

In a short period, the epidemic reached all the towns of Europe.

In different countries, different names were given to the disease: "Scabies grossa", "Bossa Blatern", "Grosse Verôme", "Mal das Bubas", "Neapolitan disease", etc., Soon however the name "Morbus Gallicus" or "French Disease" took over relating the disease with Charles VIII army where it was first declared.

Physicians of the time were astounded with such new disease they knew nothing about and about which nothing was found either in Hippocrates or Galen. Such sudden extension all over the known world scared them and they did not doubt to be a divine fate acting through astral spheres. A planetary conjugation would have triggered such calamity. Some, as the already mentioned Joseph Grunpeck, as well as Bartholommaus Stebber (1506), in his Malafranczos morbogallorum praeservatio de cura, published in Vienna, in 1498, blamed the onset of such calamity to the conjugation of Jupiter and Saturn, occurred in Mars "house" on the 25th November 1494. Other medical authors, wiser, as Nicollo Leoniceno (1428 – 1454), from Ferrara, in his paper Libellus de epidemia quam Itali Morbu Gallicum, Galli verum Neapolitanum vocant, published in Venice in 1497, the German Tübingen Johannes Whitman (1440?) in the opusculum De pustules quae vulgato nominee dicuntur mal de franczos, published in Rome, also in 1497, as well as the Bishop and the Valencian physician Gaspar Torrella (1452 - 1520) in his treaty Tratactus cum consiliis contra pudendagram, cui adjicitur in fine, printed also in Rome in the same year (and dedicated to the young Cardinal Caesar Borgia) although admitting the astrologic origin of such evil, considered that physicians could not do much regarding such fact and there was a need for therapeutic and prophylactic procedures to be taken to alleviate the disease.

If the therapeutic procedures would have revealed to be completely useless, it was growing bit by bit the certainty such infirmity was obviously contagious with experience warning that usually it was often acquired after copulation. Such evidence is pointed out by the then Medical scholar and New-Christian Francisco Lopez de Villa-Lobos (1474 - 1549), in his Sumario de la Medicina com un tratado sobre las pestiferas bubas, published in Salamanca, in 1498. This work from the future physician it is not much more than a synthesis in verse of Avicenna's Canon. It has however an annex with an expressive description of syphilis, with some irony on the forced chastity imposed by fear, as the sinning part is the sick part. On his turn, J. Widmann already quoted, advises to avoid sexual intercourse "cum muliere pustulata" (with blistered women).

However, Galenic doctrines prevailed on the evidence: the altered air was the disease transmitting agent therefore contagion would not result from the contact of the genital mucosa, but the proximity resulting from it, i. e., the influence (5) of the ill air emerging from the patience on the healthy individual body. For some, breath itself would be responsible for contagion. One of the accusations made by the political enemies of Cardinal Thomas Wolsey, Chancellor to Henry VII of England, at the time of his trial by treason, was that he would have transmitted syphilis to the King while whispering advice on his ears. Such Galenic concepts lead to adopting prophylactic steps that in some cases are reasonable but in others are totally ineffective, inappropriate and un-humane, highly discriminatory and a natural consequence of ignorance on the factual disease aetiology.

In France, the procedures taken were particularly tough and harsh. In 1497, a royal decree is published forbidding on dead penalty that any patient with "morbo gallico" of contacting the outside world.

Syphilitic Parisians are isolated in ghettos, made up of miserable sheds outside Paris walls, in the region of Saint-Germain-des-Près, after a first attempt of sending them to the leprosarium, which was revealing itself useless as leprosy patients revolted refusing such company. Regarding any foreigner arriving in Paris suspect of suffering of such terrible illness, they were forced to leave town in 24 hours.

They were given four "écus" (6) to help them return to their home, incurring also in death penalty otherwise. However no matter how harsh the laws, many foreigners were not complying with it. If the choice was to stay near Paris or returning home, they preferred to look for shelter in Saint-Germain. New laws were made determining that from then onwards any syphilitic foreigner found in that region would be drawn in the Seine, what apparently had been complied strictly with.

In Scotland, pragmatism reigned. While in Paris, loyal to the theory of the altered air, legislation was being passed in order to prevent patients of talking or having contact with healthy people, Aberdeen Town Hall ruled that all the prostitutes should abstain of their practice or they would be marked with a scalding iron and then banned.

Besides, the evidence that syphilis was transmitted mainly by prostitutes prevailed regardless of any theory on contagion. As the connection was not known, it was thought the body weakened by sexual intercourse would be more sensitive to the altered air coming from those prostitutes with the disease.

If sexual excesses were originating the disease and sexual intercourse outside marriage was deemed as a serious sin, then such disease was the divine punishment falling upon men. Although in the Middle Ages all epidemic diseases were always considered as a divinity punishment, namely the plague, called "God's Whip", the relationship of syphilis with sinful acts was much clearer. Emperor Maximilian, in the known (Edictum in Blasphemus) (The Edict Against Blasphemy), of the Imperial Diet (City of Worms 1495) considers syphilis as a God's punishment against the sexual excesses committed by the French in Naples. The pilgrimage to holy places, processions, collective flagellation, self punishment, and so on became constant. Exhortations against prostitutes grew and brothels were closed.

However in spite of all the measures taken against prostitutes, the disease was spreading inexorably.

In some places, all people in the same community were contaminated. Therefore it was concluded that the contagion was in the public baths, because in their nudity, people would be more vulnerable to the altered air. Today one can imagine the way that happened: public baths were representing a form of social interaction where people would stay in the water for a long time, not only to eliminate the "bad fluids", but also to socialize. Secondary luetic lesions, especially those located in the mucosa, eliminate a wide number of Treponema and Treponema Pallidum, although extremely fragile to adverse environmental conditions, they are kept active for about one-hour in wet environments. Besides it was a common practice, after bathing, people would subject themselves to the hands of bleeding barbers who would apply leeches, bleeding them or would cut their hair or bear. The warm water, the knives, scissors and leeches of public baths were therefore the carrier of a nonsexual form of the disease contagion, worsened then by the living conditions common in medieval communities, where people at the table would all eat by the same plate, all drinking by the same glass and in poorer households, the bed was shared (7).

Therefore syphilitic patients were forbidden from attending public baths. Panic spread among the population and soon public baths were desert or were forced to close down. Fear of public baths evolved to fear of bathing "tout court" with the collective imaginary starting perceiving such hygienic practice as a source of a number of ailments and diseases. Until the beginning of the 19<sup>th</sup> century, people would put perfume on but would not wash.

In Portugal in the 1501, the building of the All-Saints Royal Hospital, ordered by King John II in 1492 was coming to completion. The "French Disease" was also spreading through the country. Lisbon, with the beginning of the Discoveries cycle, went from a quiet peripheral town to a center of the European world boiling with foreigners.

However, there are no records of discriminatory laws against syphilitic patients, being the disease faced in a more humane way among us. A reliable and respected witness is the Andalusian physician Ruy Diaz de Isla that on his treaty *Tractado cotra el mal serpentine que vulgarmente es lhamado bubas q fue ordenado en el ospital de todos os Santos de Lisboa*, printed in Seville in 1539, tells that in 1507, he came to Lisbon at request of King Manuel I, being in charge

of treating all syphilitic patients of All-Saints Hospital in 1511 where he practiced for 10 years. When D. Manuel I died he left the hospital returning in 1524 where he stayed until 1532.

In the All-Saints Royal Hospital, Ruy Diaz de Isla was in charge of a ward where were admitted all patients suffering of the "Mal das Bubas" (Great Pox) therefore being called "Casa das Bubas" (The Pox House). Population looking for the hospital was huge and the Andalusian physician estimated in 20,000 the patients he cared for during his time in Portugal, affected by the "Serpentine Disease" name he used to refer to syphilis(8) stating that in no other hospital of Europe were cured a higher number of syphilitic patients then in the All-Saints Royal Hospital. Besides it is interesting to notice that although on the Treaty front cover, one can read the title already mentioned above, a different title appears on the prologue: Tractado llamado fruto de todos los sanctos contra o mal serpentino della ysla Españiola, meaning with this that he collected all his experience in Portugal and that such work was the outcome of the work carried out at All-Saints Royal Hospital.

In his book, the author reveals some data which enable to evaluate that "Serpentine Disease" patients were treated in a more humane and charitable way that in the reminder of Europe. Therefore, it is referred on Chapter XIII that more than once he went with the Hospital Ombudsman, Gonçalo de Miranda, searching for patients of the serpentine morbidity in church and monasteries doors, bringing them to the said hospital to cure them" something that the Spanish doctor thinks never to have been done in "no other hospital in Europe" what to him was an expression of the institution grandiosity.

Also in his treaty, he advocates that the disease had as origin the Spanish Island (current Haiti) discovered by Christopher Columbus, and from there it was spread all over the world by the Admiral ships crew, returning to Spain contaminated by the disease. He also describes, rather accurately, the clinical condition dividing in "kinds" that, in a way are not very different of the modern division in stages, although his first "kind" included the current primary and secondary stage, the second "kind" includes only partial aspects of the third stage and third "kind" only in some aspects can match the manifestations of such stage, including symptoms that are not seen at present, perhaps due to a change on the Treponema virulence.

Regarding contagion, he refuses syphilis astrologic origin acknowledging the importance of the sexual contagion, stating that it does not serve as opposing argument the fact the disease emerging in "some religious people, single women and creatures and very honest people" because the contagion "not only it is transmitted by carnal contact but also for sleeping in the same clothes and drinking from the same glass" previously used by syphilitic patients. He also acknowledged contagion through breastfeeding "because when some infected woman breastfeeds some creature the infection will be transmitted in the mouth".

In the treatment, although he dedicates part of the tenth chapter to the treatment by guaiac or holy wood, he considers the treatment by mercury in the way of ointment and applied by friction, "the main medicine for such morbidity", advising and formulating many procedures to implementing it, according to the kinds, the lesions location, the age and the patient's body frame.

Regarding prophylaxis and the precautions proposed by Diaz de Isla, it can be seen that in Portugal and regarding the prostitutes, there had been no such harsh measures as in other European countries, as the physician advocates that all "towns and villages and hamlets" should "hire an experienced surgeon and a man of knowledge to visit and help any woman who earns money" weekly, 9 not allowing that any of those infected would practice her job for one year, as this was the required time for quarantine "because as it is mentioned in the causes of this chapter that the first kind is not more contagious than 12 months". For such purpose, they should be secluded "at the home of that person that is in charge of her or in a hospital until she is cured or spends her final days: or incarcerated because it is better guarded." Diaz de Isla also suggests that prostitutes use some sign in their outfits, "some sign making them known" and distinguished from other women, as it is proposed to be compulsory having a kind of health card ("a statement from a physician") without which they could be arrested. Sanitary inspections would be extensive to maids in inns and taverns where no woman would be received at "without carrying the statement of someone in that position".

The Andalusian physician suggestion, worthy of an informed and clever public health physician, lead to the supposition of the inexistence in Portugal of discriminatory attitudes regarding syphilitic patients. It should be said that Portuguese "mild traditions" were also at work in those days, at least regarding luetic patients. Perhaps because the Inquisition was already being enough and it was not necessary to use a form of discrimination based on the disease, when the other one was starting to work excellently... Furthermore, on the different public health regulations published from 1506 onwards there are no measures against syphilitic individuals but yes against the plague ("Edict of the 27th September 1506"; "Norms taken by Pedro Vaz regarding health in 1526"; "Norms to be complied with in case of plague (may God protects us) in some kingdom or province confining with Portugal from 1695"; "Norms by the Health Care Ombudsman in Chief" from 1707).

Also in the Portuguese literature (9) from the 16<sup>th</sup> to the 18<sup>th</sup> century there aren't many references to the disease (10) and those found are never critical. In the "Cancioneiro de Garcia de Resende" and concerning the fact that Lopo de Sousa, valet to the Duke of Braganza, D. Jaime, brought from Castile in 1496, a *gangorra* (wide velvet hood) to make a jupon, Pedro Homem, jokes:

"It should be known to every Portuguese man For such cloth will never win That comes from a disease Called the "French Disease" Caught in the borders Of Perpignan Soon died the Captain"

Also in the "Cancioneiro", D. Duarte de Menezes makes a satire of love ails and other ails of Pero Fernandes Tinoco, who was in love:

"Tinoco is hiding
Wants to win her with music
But he is more lost with pox
Than with her"

When subsequently in the 17th century and by chance it was discovered a verse treating such subject, it became new at the time and even so, the subject is used as an invective against France and not to criticise or regret the patients' fate. In a satire of the end of the 18th century, of an unknown author, it can be read a reference to syphilis, and the satire was directed to Maria Francisca Savoy, wife of Pedro II, insinuating that she had been responsible for the contagion in our country:

"From a French Queen Who came here to Portugal Such wide evil was spread In this Portuguese nation"

If this was called the "Serpentine disease" by Diaz de Isla, the truth is that each nation has always tried to blame the other with the label of origin of such terrible and shameful disease. It was the "Neapolitan Disease" for the French who caught it in Naples, it was the "French disease" for the Italians and Spaniards, it was the "German Disease" for the Polish, the "Polish disease" for the Russians, the "British disease" in Tahiti. "Castile Disease" or "Castile rash" was the name given by the Portuguese and in the diseases 'import-export' caused by the Discoveries taken to Sri Lanka were natives called it "parankerere" ("The Portuguese Disease"), in India became known as "the Frengues disease" (11), in Japan it was called the "numbamkassam" or the "Southern Barbarians Evil" (the Portuguese disease) (12) and to Brazil (13).

None of such names prevailed or as even arrived to our days (14). Luckier was Girolamo Fracastori (1478 - 1554). This Veronese physician, an epidemiology precursor, published in 1530 the work Syphilis, sive *morbus gallicus* in which in three books of harmonious verses he describes in the first one, the disease, in the second the treatment, glorifying mercury through a fable where Ilceus, who suffered of the French disease due to a punishment from Apollo, is plunged in small river of "living silver" being cured. On the third book, he tells about a group of Spaniards finding in the New World an Indian tribe with the skin covered in sores, a disease that quickly spreads to Europeans. At the origin of such evil would be the Sun God Helios' rage, punishing in this way the young shepherd Syphilis for daring to rise an altar to his King Alcithous forgetting the cult and veneration due to Helios. However, nympha America saves the situation, growing a tree, the guaiac, which cured him of his ailments.

It should be noticed that Fracastori in 1546 has published in Venice the treaty *De contagione et contagiosis morbis, et eorum curatione*, with a clear intuition about the way in which both the contagion and the infection happen, imagining the existence of living particles (*seminaria*), very tiny and for such reason invisible, falling from the patient's body and adhering (by sympathy) to porous objects, on their turn contaminating (*fomites*) the skin of other people, generating

in the patients' fluids identical particles and therefore leading to the disease. He also proposes that *semina-ria* could be destroyed by *antipathy* through existing substances in the fluids opposing to them (the first notion of antibodies?). In the chapter *De Syophilide sive morbo gallico* he describes with precision the syphilis clinical aspects applying to such disease the same concepts of contagion.

In spite of some doctors, as Jean Fernel, Diaz de Isla and Fracastori insisting on the importance of venereal contagion, the truth is that such fact was not an obstacle that, in Europe, syphilitic patients were in the early days of the disease, kept away from socializing, as Galenic theories of the altered air emanating by the patient would be enough for, even at a distance causing the disease, still kept all their institutional weight (15).

Even Erasmus of Rotterdam, the Greater Erasmus, was unable of compassion towards syphilitic patients. In his Conjugium Impar he proposed that the nuptial agreement was considered void when it was verified that one of the spouses was syphilitic and he even suggests the castration of such patients. "The whole world would be saved if the first syphilitic patients had been burned", regrets subsequently.

When the poet, humanist and reformer on Ulrich Von Hutten (1488 – 1520) seriously infected by syphilis, looks for him to ask for his support for the Reformation, Erasmus refused to receive him and only talks to him through a half opened window.

Poor Erasmus! He also, in spite of his precautions, would die from syphilis! When in 1928 his bones were exhumed in Basil, it was found through histologic tests, clear syphilitic lesions.

Erasmus was in good company. The disease had reached all and everyone. All the great personalities of his time were suffering from it: Charles VII, Louis XII, Frances I Henry III from France, Emperor Charles V, Henry VIII of England, his son Edward VI and his daughter Maria Tudor, Pope Alexander VI and Jules II and even Philip II of Spain and I of Portugal, did not escape from it.

Gradually, syphilis loses at last its extremely aggressive character of the early days, becoming less virulent. At the beginning all authors describe an exuberant clinical condition: sores in the pudenda quickly spreading to all parts of the body and to the oral pharynx mucosa, myalgia, arthralgia and bone pains of a violent character with night exacerbation.

If in 1497 this is the description of Leoniceno in his already quoted *Libellus...*, in 1537 Diaz de Isla presents a condition much closer to what we know at present and Fracastori in 1546 in *De Contagione...* points out the alterations that gradually emerged in the disease reducing in the first stage of the disease the syphilid and the pain. Ulrich von Hutten himself, in his opusculum *Ulrichi de Hutten equitis de Guaiaci medicina et morbo gallico liber unus*, published in Mainz in 1519 when describing this illness and the treatments used, celebrating guaiac (Guaiacum officinalis, Linn., and Guaiacum Sanctum, Linn) states that it was almost difficult to admit that the first form, so serious, was of the same disease that was around at time of the publication.

Gradually, the disease lost virulence, reducing immediate mortality but increasing morbidity. All started with a small hard chancre followed by regional lymphadenopathies (16) and a few weeks later a dermic rash not very serious disappearing apparently without trace. That those stubborn ulcers that never healed, hair loss, changes in several organs, nervous alterations, etc emerging years later could be related to this small hard chancre cured a long time ago nobody, except a few doctors, wanted to perceive it.

Therefore, bit by bit, it was disappearing the fear of the disease that so much panic caused in the 16th century. Fear and precautions namely the use of condoms, made of lamb intestine (caecum) already proposed by Fallopius in his De morbo gallico that Madame de Sevigné labeled as "a gauze against danger, a breast-armor against pleasure". The consequence was a violent epidemic of syphilis in the 18th century. However "in this era of gallantry", it was almost a good thing to be to be contaminated with. It was like an initiation to manhood. However, in due course, ulcers would emerge all over the body, in particular in the neck and scalp, making the hair fall completely. The fashion of that century is a reflection of that. The wig served to disguise alopecia areata. Collars of abundant laces disguised the neck ulcers. The common use of gloves would cover the palmar sores and those in the face were disguised with layers of make up or powder.

Men got used to live with syphilis balancing fear and a carefree attitude. For a long time, the third stage and the terrible neurosyphilis were not related with the initial contagion, facts that medicine in the last half of the 19<sup>th</sup> century makes uncontested. Therefore panic again would rise along with prostitution

normative precautions, as well as public health, harsh and repressive. Syphilitic prostitutes were abducted, while the treatment lasted, in isolated awards without hygienic or humanitarian conditions and subject to a prison like system. The French physician Jeanel, in his works The prostitution in the great towns in the 19th century and the extinction of venereal diseases, published in 1868, proposed the creation of separate hospitals for "the segregation and treatment of men affected by the venereal disease". By the end of the 19th century, it is estimated that one third of the European population suffered of syphilis. Medical students and interns in Paris hospitals would sing together "for syphilis united we will be" and they would know how real such reverence was. Burlureaux, a French physician and professor, in his Report Regarding Individual Prophylaxis presented in 1902 in the 2<sup>nd</sup> International Conference in Brussels, on syphilis, thinks that doctors "should be so familiar with the study of syphilis that regarding no matter what patient, the idea of syphilis should be present in their spirit." The physician Alfred Fournier, also French, in his conference called A league against syphilis states that 15% of the male population in Paris (around 125,000 individuals) had the disease. In an article called Prostitution in Lille, published in August 1902 in the magazine "Echo Medical du Nord", Dr Patoir declares he was convinced the whole mankind would become syphilitic and that would be an unavoidable fact (17). To fight against syphilis in 1901 it was founded the French Society of Sanitary and Moral Prophylaxis that as its name would indicate, would be a pressure group moralizing the French society. Favorable to a strict regulation of prostitution, he addressed his overwhelming efforts for the education of sexuality in youngsters, having as purpose the eradication of syphilis through "moral grounds, the purification of the habits, the awareness of duty, the respect for the young woman and yearly unions". The already quoted Prof. Burlereaux, in the same conference points out chastity before marriage and monogamy as "the safest shelter against the venereal danger" and exhorts ministers of all cults to unite to the campaign against the venereal danger; because "it is the moral education the essential factor for the prophylaxis against venereal diseases". "We only have one wife, it is formal and indispensable. That is so true that moral and medicine, now as always, show their inseparable union" stated convinced another

French doctor, Dr Monnet, in his *Advice to the Afflicted*, published in 1904. The anxieties and fears of this syphilitic end of the century, emerging from the medical and public health literatures, had then and always translation in literature. *Nana* by Emile Zola is a good reflection of all this. As today with AIDS, love was followed by fear and anxiety as Goethe sang in his "Roman Elegies"

"... it is entirely hateful in the path of love to be afraid of finding serpents and poison under the roses

Even worst at the most beautiful moment of pleasure, when fear approaches your leaning head"

However, at the beginning of the 20th century and after discovering the aetiological syphilis agent, Treponema pallidum, by the German physician and bacteriologist Schaudin in 1905 and a serologic laboratorial diagnosis, in 1906, by another German physician and bacteriologist, August Von Wasserman, (1866 -1925) it was followed by the discovery in 1909 by the German physician Paul Erlich (1854 – 1915) born in Sylesia and Nobel Price winner in 1908, of a relatively more efficient therapy then toxic mercury, arsphenamine, (606 compound or Salvarsan) bringing so much hope to mankind. However this anti-syphilitic drug, did not solve well dermic lesions, and did not totally eradicated Treponema. Only in 1928 with the discovery of penicillin by the English bacteriologist Alexander Fleming (1881 – 1955), that was produced and marketed in big quantities from 1943 onwards bringing the nightmare to an end.

For almost 450 years, syphilis reigned in Europe and the rest of the world, depriving millions of people of health and life, of the joy of living and happiness, changing both the social and personal behavior. With the discovery of penicillin it look like the gates of hell had been shut and it was all over.

Unfortunately the cycle has restarted. AIDS replaced syphilis. For how long will we live the fears and anxieties that our ancestors have lived in for almost this half millennium?! To remember the way they behaved would serve, at least, to prepare us for this new trial.

### **Notes**

1. Rui Diaz de Isla in his aforementioned *Treaty against the Serpentine Disease*, refers that the illness would

have started in 1493 in Barcelona where the Catholic Kings would be, because when Colombo with some of his men, went there to meet them, reporting "his trip and what they had found out almost immediately the town became infected and the infirmity was spreading".

This statement is not very likely if it is considered that very few crew members arrived to Condal City. Besides, the Sicilian Scillacio, writing from that town on the 18th June 1495 says the disease "brought from France" was beginning at that moment in Barcelona. 2. The King of Spain sent a fleet under the command of Gonzalo de Cordova

3. Those who advocate that syphilis had American origin have been contradicted by authors proposing an European origin for such disease, the argument being that since the Antiquity there are descriptions. that in their views, match the luetic ill. Angelus Blondus in De origini Morbi Gallici (1542) refuses the view that the disease has American origin; because it would have been known in Europe well before Colombo although disguised under the designation of leprosy. Bernard de Gordon, a lecturer in Montpellier, in his work Lilium medicinae describes "leprosy" as being highly contagious, acquired by venereal contact, with a short incubation period and referring that children are born with it. Well this condition is a characteristic not of Hansen's disease but of syphilis. Besides the same kind of description is found in the primitive medical literature: Joanes Platearium (11th century), Joannes de Gaddesden (1280 - 1361), Arnaud de Villeneuf (1235 - 1312) and Henry de Mondeville (1306?). Of reference, as another witness worth of note, is the letter sent by the Milanese Pietro Martire d'Anghiera, in April 1488, to the Salamanca Hellenist, Doctor Arias. In this message, he describes a disease presenting some of syphilis symptoms (sudden onset, drowsiness, ulcers, intense joint pain) and he calls it "hispana Bubarum". Another point favoring a pre-Colombo syphilis is the high value given to all mercury both in the Antiquity as in the middle ages. "The Saracen Ointment" so popular among Crusaders was the treatment for "leprosy", but it was only mercury in a fat excipient, ineffective against leprosy, but rather effective in dermic syphilitic lesions. However and besides all the post-Colombo witnesses, the truth is that palaeopathology studies resulting of careful investigation carried out by Elliott Smith and Wood Jones, in millions of skeletons from Egyptians

and Nubians, did not reveal any syphilitic lesion. From factual, in the Old World, were only found a few lesions in pre-historic skeletons in Marne and Transbaikal of the Bronze Age. On the other hand, in the New World and in some skeletons of pre--Colombian periods, existing in Argentina (Black River), Peru (Canete), Mexico (Ttatelolco) New Mexico (San Cristobal) and Ohio, lesions were also found with luetic features. It is therefore likely that syphilis is an existing infection from the most remote Antiquity on both sides of the Atlantic. However, it should be considered however that treponemas producing endemic and venereal syphilis (T. Pallidum), yaws (T. pertenue) and pinta (T. Carateum) are not distinguishable morphologically and only have slight serological differences among them, causing bone lesions, the two first ones. Therefore, some syphilologist are proposing uniform criteria for these four diseases, admitting the hypothesis the results are from only one adaptation of Treponema to environmental changes. Pinta might have been the first form of infection caused by Treponema in the Palaeolithic period which, due to successive adaptations to the environment was transformed in a way it caused the reminder treponematosis. Anyway, the existence of the "Great Pox", in Antilles natives is clearly witnessed by Colombo's biographist, Bartholomew de Las Casas, who arrived in the Spanish Island in 1502 and got informed there about how ancient the disease was.

- 4. In spite of the general view that the epidemic was originated in Naples siege with Fallopius supporting such view, the truth of the matter is, that most likely, the infectious foci would already exist in the French army, a consequence of the Spanish mercenaries integrating it. It is to be noted that Giovanni de Vigo (1460 – 1530?), in the fifth book of his treaty Practica in arte chirurgica copiosa, published in Rome in 1514, states that the disease has started since December 1494 when the French were still around Rome.
- 5. This concept of influence (in Italian, influenza) is responsible for the current designation of influenza given to the flu
- 6. Currency unit valid in France at the time
- 7. Although syphilis is a venereal disease there are situations in which the infection is not transmitted by sexual intercourse. Lack of hygienic conditions and the common use of the same containers to eat and drink are responsible for the contagion from one individual to another particularly through the mouth.

It is the case of "Bejel", a form of non venereal syphilis occurring among Bedouins.

8. "according to its ugliness there is no other thing that more naturally it can be compared with than serpents: because like the serpent is an ugly and frightful and amazing animal so is this infirmity ugly frightful and amazing" (in Treaty...)

9. The surgeon should charge for "each Saturday attending her should be charged 10 maravedis" <sup>1</sup>

10. Natural exception made to the medical literature: the Doctor (by Salamanca) Duarte Madeira Arraes (? -1652) born in Moimenta da Beira, and major--physician of the "pulse" to King John IV, produced the book A method to know and cure morbo gallico (Lisbon 1642) in which he covers all the syphilitic pathology, dividing it (as Giovanni da Vigo) in incipient and confirmed (this with four classes). He admits a hereditary transmission, defending the use of mercury with moderation, he believes in contagion advocating the American origin of the disease. The physician to King John V, Francisco da Fonseca Henriques (1665 – 1731), born in Mirandella and graduated in Coimbra, republished in 1750, the treaty by Madeira Arraes, adding many personal observations. It is the "Illustrated Madeyra ..." that does not add much to the original. But the Doctor (by Salamanca) Antonio Nunes Ribeiro Sanches, born in 1699 in Penamacor and deceased in Paris in 1782, a disciple to Boerhave and a physician to Catherine of Russia, publishes in Paris in 1750 a Dissertation on the origin of the venereal disease, in which one can prove that it was not brought from America but it started in Europe through an epidemic, and in 1774 in Lisbon it is published The historic exam on the appearance of the venereal disease in Europe and about the nature of such epidemic. In these two works he denies the American origin of syphilis and he is so persuasive that Maximiliano de Lemos, in his well known the History of Medicine in Portugal (Lisbon 1899) considers his argument irrefutable, a well understandable view because only much later on will be known the results of the palaeopathology investigations already mentioned. He also left some Observations on venereal diseases, published after his death in which he exposes all his long practice on the diagnosis of chronic syphilis, stating the existence of visceral lesions and describes the treatment through mercury agents under the form of pills associated to purging drugs. 11. The Jewish Portuguese physician Garcia da Orta

(1501 - 1568), born in Castelo de Vide and graduated in Salamanca and physician to the Viceroy of India, Martim Afonso de Sousa, points out such denomination in his famous COLOQUIOS DOS SIMPLES "(Presentation to the simple minded) and drugs and medicinal things from India and also from some fruits found there, where a few things regarding practical medicine are treated and other things good to know, gathered by Dr Garcia d'Orta, physician to Our Lord the King, seen by the honorable gentleman, the graduated Aleixo Dias Falcam, representative of the Casa de Supricaçam, Inquisitor in this part of the world", published in Goa in 1563. In the 34th Presentation or the Mangoes, he explains to Ruano, the Spanish doctor and his imaginary listener, that "Frangues" was the generic name given to Christians and extended to the Portuguese, because the first Westerns known in Asia were French (Francos). For the sores, Garcia da Orta adopts the spelling "Fringui". He also dedicates the 47th Presentation to the root of China (Smilax China, Linn) praising its qualities in the treatment of syphilis. 12. Many other names have been given to syphilis. Apart of those already quoted and the expression "Lues Venereal" detailed in the following note, 400 designations are known among them "St Job's Disease", "St Mevio's Disease", "St. Serment's Disease", "The Turks' Disease", "The Christian's Disease", "Kabila's Disease", "Fiume's Disease", "mentulagra", "pudendagra", "mentagra", "Great Pox", "French Pox", and for American Indians the expressions "goyaras", "taybas", "issas" and "hipas" would designate the Pox. Lastly, modern authors created the expression "avariosis" for this disease.

13. About this country, Gilberto Freire, in his work, Casa Grande e Senzala, says: "it is said that civilisation and syphilisation walk together. Brazil seems to become syphilitic before becoming civilized: the first Europeans who arrived have disappeared with the Indigenous mass almost without leaving other European trace apart of the spots of mixed races and syphilis. They did not civilize: there are however traces of having taken syphilis to the aborigine population who absorbed them". Regarding the black population, he states that "the big houses masters have contaminated the senzala black women. Black girls very often delivered virgin, with twelve to thirteen years old, to already syphilitic white boys, because for a long time there was the belief in Brazil that for a syphilitic patient there would not a better clearance then a young black virgin girl". He also refers that at "the beginning of the eighteen century Brazil is already mentioned in foreign books as the land of syphilis by excellency. John Barrow, an English traveler of the 18th-century, who had traveled in Brazil reported that even in monasteries the Gallic Disease was causing devastations". 14. Except "Lues Gallica", an expression proposed by N. Leoniceno in his already cited work Lues Venereal or Luetic Disease, a hardly used expression even today and used for the first time by Jacques de Bethencourt, a Rouen physician, in his book Nova penitentalis quadragesima nec non purgatorium, published in 1527. Silvio Jean Fernel (1497 - 1558), royal physician, anatomist and professor of Paris Medical School, is owned the confirmation of the expression, emerging from his work the De Lue Venerea

15. Syphilis, as such, appears as a totally unknown disease until then, contributing to the blossoming of the renaissance spirit, undermining the usual scholastic reverence due to the classic medical authors. This is one of the facts encouraging Paracelsus to entirely reject the authority, uncontested until then of Galen. Also the medical knowledge resulting of the discoveries drives that with a totally justified pride, Garcia da Orta, in his Coloquios states that ... "it is known more in one day by the Portuguese that in 100 years by the Romans", or that his contemporary Amatus Lusitano says "in our times a lot is owed, in my view, to the work and drive of the Portuguese, not only because they opened new kingdoms but also for things related with Medicine that forgotten or ignored came to light".

16. The inguinal adenopathy characteristic of syphilis, was denominated by a number of Portuguese Medical authors as the groin tumour, bubão gálico, mule and encordium

17. In the same article, Dr Patoir referes that the mistresses and under mistresses of brothels were very skilful in the make-up of the big and small vaginal labia of the prostitutes under their care, disguising syphilitic lesions applying small bits of tainted gauze and huge amounts of carmine. They were also very skilful in emptying a Bartholinitis or in making disappear any "rebel mucus or too adherent". Such kind of "skills" would serve not only to avoid any suspicion to the interested client, but also to the weekly home visits by the doctor appointed by the police Vice Squad, deceiving the clinician who would be more absent-minded or in a rush.

#### References

Conn, H. F. and Conn, R. B. Current Diagnosis 5. Published by WB Sounders Company, Philadelphia, 1977.

Corbin, A. Les filles de noce. Published by Editions Flammarion, Paris, 1982 Cruickshank, R; Duguid, J. P: Marmion, B.P.; Swain, C. H. A.: Medical Microbiology 1. Volume, 12th edition, Churchill Livingstone London 1973

David Peyre, Ivonne. Le personnage du médecin et la relation médecin-malade dans la littérature ibérique du XVI et XVII siècles. Published by Editiciones Hispano-Americanas, Paris, 1971.

Diaz d'Ysla, Ruy. Tractado cotra el Mal Serpentino. Facsimile publication by the Organizing Committed of the 5th Century of All-Saints Hospital foundation and the Portuguese Medical Association integrating the editions of collections in the Library of the Medical Association (In charge: J.C. Fernando Rodrigues, J. Germano de Sousa and Amelia Ricon-Ferraz), Lisbon 1992.

Freire, Gilberto. Casa Grande e Senzala. Published by Livros do Brasil, Lisbon, no date.

Garcia da Orta. Coloquios dos Simples e Drogas da India, Edition published by deliberation of the Royal Academy of Sciences in Lisbon, addressed and noted by the Count of Ficalho, Volumes I and II, Imprensa Nacional, Lisbon, 1895 Glassscheib HS. Os Grandes Segredos da Medicina, published by the Livros do Brasil, , Lisbon, no date

Lo Duca. Histoire de l'Erotisme, published by "La Jeune Parque", Paris 1969 Lemos, Maximiliano de. História da Medicina em Portugal, Doutrinas e Instituições, second volume published by Manuel Gomes, Lisbon 1899.

Lemos, Maximiliano de, A Medicina no "Cancioneiro de Garcia de Resende", in Arquivos da História da Medicina Portuguesa. New series, 11th year, edited by Lemos & Cia, Suc, Porto, 1920

Mc Neill, William H. Plagues and peoples. Published by Monticello editions, New York 1976

Paniagua J.A. Clinica del renaciemiento, in Historia Universal de la Medicina, directed by Pedro Lain Entralgo, published by Salvat Editores, S.A., Barcelona, 1973. Sournia, Jean Charles. Histoire de la Médecine et des Médecins, published by Larousse, Paris, 1991.

Wells, Calvin. Bones, Bodies and Disease, published by Thames and Hudson, London 1964

Walker, Kenneth. Histoire de la Médecine, published by Editions Gérard & Co., Verviers, 1961.